

ABSTRACT OF THE DISCLOSURE

5 A system for selecting routing information from a routing  
table describing alternative routes between end nodes. The  
routing table represents a set of minimum cost, deadlock-free  
10 routes between end nodes. The selected routing information is  
included in forwarding tables, and sent to networking devices in  
the network. The selected routing information is optimized for at  
least one network performance metric, such as overall network  
capacity or fault tolerance. Capacity optimization is obtained by  
selecting from alternative routes stored within the routing table  
such that the standard deviation of the number of routes flowing  
over each link in the network is minimized. Fault tolerance  
optimization is achieved by selecting from the alternative routes  
stored in the routing table such that the selected route for a  
given end node pair has a "failover" route with a maximum number  
of dissimilar links from the selected route.

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